

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of

Petition for Rulemaking of the Wireless
Ethernet Compatibility Alliance To Permit
Unlicensed National Information Infrastructure
Devices To Operate in the 5.470-5.725 GHz
Band

RM-10371

COMMENTS OF NOKIA, INC.

Nokia, Inc. ("Nokia") hereby submits comments in the above captioned proceeding to encourage the Federal Communications Commission ("Commission") to support the Petition for Rulemaking ("Petition") filed by the Wireless Ethernet Compatibility Alliance ("WECA"), which seeks a Commission allocation of the 5.470-5.725 GHz for use by radio local area networks ("RLANs") and other unlicensed service devices. Nokia is a global company with over 60,000 employees with key growth areas in wireless and wireline communications. A pioneer in mobile telephony, Nokia is the world's leading mobile phone supplier and a top supplier of mobile, fixed and IP networks, as well as related services.

As noted in the WECA Petition, 300 MHz of spectrum at 5.15-5.35 GHz and 5.725-5.825 GHz is currently allocated for use by RLAN services that will provide short-range high-speed wireless broadband access. Nokia shares the view of WECA that, driven by increased demand for broadband wireless services, additional spectrum will be required for RLANs and other unlicensed service devices in the United States. Initial studies indicate that these spectrum requirements will be on the order of 540 MHz by 2010. Extension of the unlicensed 5GHz bands to 5.470-5.725 GHz would help to fulfill this projected demand, would be in harmony with international allocations for RLANs and other unlicensed devices, and could be done without harmful interference to incumbent users with the proper mitigation techniques.

Nokia believes that this additional spectrum for RLANS and other unlicensed devices should be harmonized with allocations in other countries. Globally harmonized spectrum creates economies of scale that make equipment less costly to manufacture and market, thus reducing costs to the end-user. By creating a larger global market for this equipment, globally harmonized spectrum opens up new markets for previously domestic or regional manufacturers. Moreover, globally harmonized spectrum facilitates the provision of similar services on a global basis by allowing the increasing number of users that travel across international borders to use their equipment outside their home countries.

The unlicensed 5 GHz band can be extended to 5.470-5.725 GHz without harmful interference to incumbents. As the band is shared with various radars, mitigation techniques such as DFS will be an essential element to facilitate sharing in this band. These mitigation techniques will both protect radar

operations and enable RLAN and other license-exempt operations, as the transmitted power levels from radar efficiently prevent these license-exempt operations in the vicinity of radars.

Given the work already underway within the ITU-R, it is timely for the Commission to review this issue and consider an additional allocation for RLANs and other unlicensed 5GHz devices. The World Radiocommunication Conference-2003 (WRC-03)'s Agenda Item 1.5 will review and consider regulatory provisions and spectrum requirements for the 5.150-5.725 GHz including issues that relate directly to RLAN allocations and regulations.

For these reasons, Nokia respectfully requests that the Commission grant the Petition for Rulemaking and amend Part 15 of the rules, authorizing use of the 5.470-5.725 GHz band by U-NII devices.